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Beyond the Fraud Triangle

Swiss and Austrian elite fraudsters

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1. Introduction

The content of rules, auditing standards and criminal laws is constantly changing over time and jurisdiction: thus, the framework within which the label of „fraud“ is attached is relative from a legal as well as from a social point of view (Sutherland, 1939). Attempts to generate – explicitly or implicitly – a universal definition and demarcation of "fraud" invariably generate boundary disputes. Under the interdisciplinary and multifaceted concept of fraud, we generally mean a criminal violation of financial trust (Cressey, 1950; Sutherland, 1941). White-collar criminals, sometimes called "trust violators", commit fraud in a business environment, usually without any physical force, and confer an illegal economic advantage for themselves and/or for their organisation. According to our paper, the illicit behaviour of our convicted Swiss and Austrian fraudsters in the course of their occupational activities (or by abuse of their authority to dispose of corporate assets) causes serious tangible and intangible damage. Explanations for why some individuals do not follow certain rules under adverse conditions and others do still provoke debate in accounting, criminology and in other fields of research.

Offenders' perspectives on the elements of the Fraud Triangle (FT) – opportunities, motivations and rationalisations – have received little analytical attention and, though their perspectives do not have an exclusive claim on authenticity, they are worthy of our interest.

Several risk factors of different fraud standards are predicated on the FT (Cohen et al., 2010; Lou & Wang, 2009; Murphy, 2012).¹ The FT is a sub-set of the more generic Crime Triangle, and though it focuses us away from broader issues of the non-incrimination of privileged business

Non standard abbreviations include: Association of Certified Fraud Examiners (ACFE); American Institute of Certified Public Accountants (AICPA); Auditing Standard (AS); Chief Executive Officers (CEOs); European Academic Software Award (EASA); Fraud Triangle (FT); Institut Der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW); International Federation of Accountants (IFAC); International Standard on Auditing (ISA); Money Ideology Coercion Ego (M.I.C.E.); Public Company Accounting Oversight Board (PCAOB); Prüfungsstandard (Auditing Standard) (PS); Statement on Auditing Standards (SAS); white-collar criminal (WCC).

¹ The fraud risk factors' relevance is acknowledged by American standards, [see Auditing Standard (AS) No. 5 (PCAOB, 2007) or Statement on Auditing Standards (SAS) 82 (AICPA, 1997)] as well as by other international auditing standards [Prüfungsstandard (PS) 210 (IDW, 2006), International Standard on Auditing (ISA) 240 or ISA 250 (IFAC, 2013)]. The Statement on Auditing Standards, SAS 99 (AICPA, 2002), "categorizes these factors according to the fraud triangle" (Wilks & Zimbelman, 2004, p. 723; Donegan & Ganon, 2008; Norman, 2010). Most recently, the AICPA redrafted SAS, "Consideration of Fraud in a Financial Statement Audit" (Dorminey et al., 2012) to enhance the clarity of drafting conventions and to converge with ISAs (effective for audits of financial statements for periods ending on or after December 15, 2012). According to the AICPA, the clarified SAS does not change or expand SAS 99 in any significant respect (AICPA, 2012).

elites (Barak, 2012; Friedrichs, 2009)², it is commonly used in academic and professional circles as a heuristic framework for explaining fraud. Fraud courses are rare in business schools (Choo & Tan, 2007), especially before the financial crisis: nevertheless, though awareness alone might not have prevented the corporate excesses that led to the crisis, it has been asserted that “every corporate executive needs to understand the fraud triangle” (Biegelman & Bartow, 2006, p. 33).

The fundamental sociological conception of how we construct the motivation to commit a crime is found in the academic contributions of C. Wright Mills (1940) and Donald R. Cressey (1953), who note “that motives are not biological drives which „cause“ us to act in certain ways”; but this is only part of the explanation of why and where offending happens (Shover & Hochstetler, 2006). Differences in organisational as well as societal culture might be expected to play some part in regulating behaviour, because even within different capitalist societies and groups, there are variations in what forms of business (mis)conduct are acceptable and unacceptable. One of the competitive advantages of Switzerland (and perhaps to a lesser extent Austria) is a high reputation³ for discreet and honest guardianship of funds, however acquired.

The preservation of that reputation is a central political and social objective, which is threatened by fraud or at least by beliefs that there is a “significant risk” of fraud, especially of fraud by bankers and other trusted persons. Within that framework, one might expect a strong understanding that fraud will be firmly reacted to (formally and/or informally), and thus – for those wedded to social respectability and to remaining within the country or social group – this should constrain people’s willingness to engage in fraud and allied deviant behaviour, provided that they define what they are doing as the sort of behaviour that will be both detected and reacted to as fraud. Though more than offenders’ childhoods (Piquero & Moffitt, 2014) or personality characteristics (Babiak & Hare, 2007), these sociocultural factors cannot readily be altered; but organisations are able to change their institutional framework to remove some cultural and situational stimulants to white-collar crime.

This article provides an opportunity to examine white-collar offending with insights from offenders themselves, primarily from our original research in Austria and German-speaking Switzerland, but also more generally. First, we provide a theoretical discussion of the initial development of the FT and its elements, including the significant work that has followed. This framework is next in fame to Edwin Sutherland’s differential association (1939; Cressey, 1954), and perhaps to a lesser extent to strain as well as to coercion theory (Colvin et al., 2002; Donegan & Ganon, 2008), as a model for identifying the conditions under which white-collar crime may occur and for explaining fraud in organisations. Since the triangle has received

² Like situational crime prevention generally, it takes for granted the legal framework, which itself is the creation of a political process affected by campaign financing and lobbying: a particularly important issue when we consider crimes that affect the interests of capitalist firms, though intra-capitalist conflicts should not be ignored in making sense of the criminalisation process.

³ The principal exception to this is the hotly disputed allegations about what Swiss banks did with “Nazi gold” taken from the Jews (Bower, 1997). This is not to contest that part of the historic popularity of Switzerland, and to a lesser extent Austria, as a haven for international funds was also its banking secrecy provisions, which later was transmuted in public discourse to „customer confidentiality“.

institutional recognition, international scientific management papers have increasingly focused on it. Wolfe and Hermanson (2004) expand the FT to a quadrangle named Fraud Diamond by including an additional element: The capability to commit fraud.⁴ The Fraud Diamond or alternative models, e.g. the fraud scale, the triangle of fraud action, M.I.C.E. etc. (Albrecht et al., 1984; Dorminey et al., 2012; Kranacher et al., 2011) are not relevant to this work. Secondly, we present the methods of our examination, which was conducted through interviews with convicted fraudsters. Third and last, building from an offenders' perspective, we discuss similarities and differences between the literature findings and this empirical study. The findings of this study refine our understandings of the relevance of each FT element and for the manner in which offenders perceive and evaluate them. Is the FT an adequate explanatory model? Then we illustrate some implications and suggest intensifying the dialogue with criminological research as well as other scientific disciplines to enrich fraud accounting research and practice.

2. Theoretical background

Almost 60 years ago Cressey, cited as the most influential developer of the FT – though the original idea came largely from a European, Svend Riemer (1941) – presented comprehensive details of the model in his highly regarded book, *Other People's Money* (Cressey, 1953). At that time, the model, inter alia based on interviews with white-collar offenders, was mainly limited to embezzlement as a delinquent violation of financial trust (Cressey, 1953).⁵ During these early stages in social scientific approaches to explaining white-collar crime, Cressey proved that there have to be more elements than just a financial incentive to commit fraud. Albrecht et al. (1982, p. 34) follow Cressey (1953) in arguing that all three conditions of the FT are necessary in the commission of fraud: "There must be (1) a non-sharable problem, (2) an opportunity for trust violation, and (3) a set of rationalizations that define the behaviour as appropriate in a given situation". Loebbecke et al. argue that a material management fraud would be "highly likely" if there is opportunity, motivation and moral character to commit fraud, and "if any one of the requirements is absent, then fraud would be deemed highly unlikely" (1989, p. 4; Wilks & Zimbelman, 2004). More recently, the AICPA (2002) quotes the following statement: "When fraud occurs there are three conditions that must be present: A. Incentive/pressure [...] B. Opportunity [...] C. Attitude/rationalization" (p. 8), echoed by IFAC (2013). Therefore, the FT has become conventional wisdom. Albrecht and Albrecht (2004) compare the FT with those elements that are inevitable for fire: oxygen, heat and fuel. "Firefighters know that a fire can be extinguished by eliminating any one of the three elements" (pp. 20–21). The risk of fire, or fraudulent behaviour in relation to the FT, can accrue only from interaction between all components. However, these

⁴ Wolfe and Hermanson (2004) categorise capability into a) position/function, b) brains, c) confidence/ego, d) coercion skills, e) effective lying and f) immunity to stress.

⁵ The term "Fraud Triangle" does not exist in Cressey's original writings.

elements may be necessary but not sufficient conditions for fraud. Indeed contrary to the Fire Triangle – if there is no oxygen, there can be no fire – the FT elements are substitutable, as demonstrated in the results of the following study. About 30 years ago, Romney et al. (1980) depicted this replacement theory. They summarise results of an interdisciplinary two-year study. According to them, fraud consists of (i) opportunity plus (ii) situational pressure (as a motivation) plus (iii) personal characteristics, e.g. integrity. They assume an additive combination of the FT elements: “A fraud could theoretically occur under any situation if a person is motivated enough, even in the absence of outward opportunities or pressures” (p. 64). Once the sum of these three major elements has reached a certain magnitude, fraud will occur (though the methodology for quantifying the elements remained obscure).⁶ Instead of an additive approach, Loebbecke et al. (1989, pp. 4–5) suggest a multiplicative one. For them, (i) opportunity, as “the degree to which conditions are such that a material management fraud could be committed” multiplied by (ii) motivation multiplied by (iii) offenders’ “attitude or set of ethical values” generate deviant behaviour. Today, their approach is still a dominant one, however questionable the conceptual and empirical basis for it may be.⁷

Opportunity as a first FT element enables white-collar crime for a trust violator (Riemer, 1941). The crucial point to appreciate, however, is that few such opportunities will be exploited, for opportunity is a necessary but not a sufficient condition for fraud. Irrespective of how strong the manager’s motivation may be (Coleman, 1987), fraudulent acts are not possible without opportunity and the recognition that there is one to make money or avoid loss; otherwise, even the existence of an objective opportunity would be irrelevant. Coleman characterises this necessary element as attractive or unattractive from an offender’s perspective through the expectation of future benefits, potential risks and other opportunities. According to him, the attractiveness of an illegitimate opportunity (however rationalised by the individuals) usually increases as the availability and attractiveness of a legal opportunity decreases. Different circumstances could encourage crime. These include an unstable or too complex organisational structure, inappropriate “tone at the top”, a shortage of staff, lack of audit trail and responsible corporate governance, too little awareness or sensibility training, missing know-how, negligence or failure to discipline fraud perpetrators (AICPA, 2005; Dellaportas, 2012; Gobert & Punch, 2003; Hogan et al., 2008; Ramamoorti, 2008; Rezaee, 2005). If the organisational compensation system rewards individuals exclusively on the basis of performance with little or no regard for legal compliance and methods used to achieve their goals, the attractiveness and consequently the feasibility of delinquent behaviour may increase (Herbert et al., 1998).⁸ Moreover, it seems

⁶ They do not show how it is possible to scale or calculate these three elements. For instance, someone asserts: opportunity = “3”, motivation = “5” and rationalisation = “2”; total = “3+5+2 = 10.” But it is quite obscure how we can standardise the basis for these ratings and make them therefore evidence based.

⁷ For instance, someone asserts: opportunity = “3”, motivation = “5” and rationalisation = “0”; total = “3*5*0 = 0”; hence, in absence of one element “zero fraud” is implied.

⁸ In our view, the impact of this sort of compensation system on the risks respectively of crimes against the organisation and of crimes on behalf of its formal goals need to be analysed separately. Though in the light of

attractive for an offender to commit fraud and stay hidden within an organisation consisting of inexperienced or inattentive individuals. A routinized tick box control system in an organisation may be regarded as offering poor controls and consequently additional opportunities for potential fraudsters, ultimately considered as a provocation or even as a positive invitation (Bell & Carcello, 2000; Fink et al., 2008; Loebbecke et al., 1989; Lou & Wang, 2009; Murdock, 2008; Norman, 2010; Wells, 2001). It should be emphasised that many frauds develop over time from small beginnings that – when not reacted to – may escalate, so control weaknesses enable both “one-off frauds” and a series of frauds, contributing greatly to total losses.

Clinard and Quinney imply that corporate crime is a fraudulent act of the organisation itself or rather, is committed by internal staff of varying seniority on behalf of the corporation (1973; Braithwaite, 1985); while offenders who commit occupational crimes are enriching themselves personally and harming employers in the course of their occupation (ACFE, 2014; Albrecht & Albrecht, 2004; Schrager & Short, 1978). Goldstraw-White describes corporate and occupational crimes as “confused and blurred” (2012, p. 3) but does not go into greater detail. In the end, it remains variable how far fraudsters who deceive on behalf of their organisation or unit within it may also benefit personally from their criminal acts (Shover & Hochstetler, 2006), for example via performance bonuses and promotion/not becoming redundant. This distinction addresses the question as to what goals the offenders are pursuing and categorises them into personal and organisational intentions, though an organisation always acts through one or more of its individuals; but it does not explain incentive as a motivational element. However, the second FT element, motivation, is an individual one and reflects the personal aims of an offender, though these may be mediated by social pressures to conform to peer group social values such as providing “well” for your family, having the “right kind” of cars and holidays, and other aspects of the infinite anomie of the rich. Reducing all incentives to a common denominator appears to be a mistake as there are many different forms, e.g. the need for operational financing caused by poor business results, an extravagant lifestyle, a search for status and expensive extramarital affairs, divorces or addictions (Efendi et al., 2007; Fink et al., 2008; Hogan et al., 2008; Lou & Wang, 2009; Murdock, 2008; Rezaee, 2005). There are additional non-monetary motivations, too, e.g. Spencer (1959) describes an approach with individuals tending to risky actions because of their so-called “gambling instinct”, which can be influenced positively or negatively by the organisational culture (Wheeler, 1992), including a high concentration of testosterone (Coates, 2012). Frequently, fraudsters are driven more by the fear of losing everything they have achieved in their life, e.g. prestige or money – so-called “fear of falling” – than by the incentive to gain more (Heath, 2008; Levi, 2010b; Piquero, 2012; Wheeler, 1992); (though in both cases, they have more funds than they would otherwise have). Meeting analysts’ forecasts, poor personal or organisational credit standing, unmanageable debts, and unexpected large contingencies such

recent huge fines against financial institutions in many countries, the latter may receive a higher control priority than in the past.

as medical bills – especially crucial where decent medical care is privatised – can provoke pressure (Crutchley et al., 2007; Hogan et al., 2008; Murdock, 2008). Like incentives, pressure is not necessarily monetary: it can include items such as divorce, illness or difficulties with children as well as various other private problems (Dorminey et al., 2010). Not everyone will behave illegally in high-pressure situations. Private or occupational difficulties, which may lead people to feel that they need to take money in an unauthorised way to meet all expectations, are frequently cited as “non-shareable problems” (Cressey, 1950; Cressey, 1953). Consistent with previous findings, Lou and Wang (2009) affirm a positive correlation between sustained financial pressure from an organisation or supervisors and fraudulent statement reporting.

Neutralising discrepancies between the moral beliefs of actors and the criminal act indicate the third FT element to be in essence a psychological rationalisation process using socially available motives. The perpetrators try to find or unselfconsciously find an acceptable motive for their actions while maintaining the positive self-image, as far as possible avoiding a guilty conscience. Cressey highlights that “they merely „kidded themselves” into thinking that it was not illegal” (1950, p. 743). In addition, to make misconduct plausible, it seems relevant to show the criminal acts in case of detection intelligible to the social environment (Cressey, 1953). Hence, offenders try to rationalise their delinquent behaviour, by trying to make it more acceptable in the eyes of the social group to which they belong and to minimise the negative emotions of others, e.g. shame, as well as perceived harmfulness and wrongfulness, if they are detected (Benson, 1985; Goldstraw-White, 2012; Levi, 2002; Murphy, 2012)⁹. As Albrecht and Albrecht note, “nearly every fraud involves rationalization” (2004, p. 40) because the fraudsters “know what morality and the law require of them” (Heath, 2008, p. 611). When offenders violate strong social norms, so-called accounts or socially approved vocabularies are of great importance (Mills, 1940) to neutralise morally (and in some cases legally) fraudulent acts if the conduct is called into question (Scott & Lyman, 1968). All attempts to rationalise their behaviour could be generally brought into manifold excuses, e.g. “everybody else does it”, “nobody will get hurt”, “the company can afford it” etc. (Dellaportas, 2012; Klenowski et al., 2010; Levi, 2008; Murphy, 2012; Spencer, 1959; Stadler & Benson, 2012; Sykes & Matza, 1957). Murphy (2012) examines rationalisation and attitudes in an experiment with accounting students, who were provided with the FT elements of opportunity and motivation. She reveals that participants who report that they would commit fraud use rationalisation easily after their delinquent behaviour, even if the offenders had no need to explain themselves to external audiences, e.g. without penalties. In addition, she found that individuals with an “attitude favouring misreporting, or higher Machiavellians” (p. 254) are more likely to commit large trust violation. Murphy’s results illustrate that fraudsters with Machiavellian characteristics carry a smaller emotional burden from their misreporting. According to Willott et al. (2001) some offenders go so far as to regard themselves as a kind of situational victim without

⁹ A sociobiologist might argue that such blame and harm mitigation would also reduce the risk of formal action, and therefore is more than psychologically functional.

control over what they did or, one might consider in the passive voice, over “what happened”, which lacks culpable agency. They can even consider their fraudulent behaviour as an unavoidable part of current business practices – apparently to the credo: “business is business” (Cressey, 1954; Galbraith, 2004).

3. Methods

White-collar criminals themselves are a good if methodologically perilous source of insight into explaining financial trust violations. Even though there is an increasing focus in recent research on implementing criminal managers’ perspectives, interviews with fraudsters remain rare in the world of white-collar crime. The present article involves an empirical study focusing on perpetrators who have been convicted because of financial statement fraud, corruption, bribery, embezzlement, and accounting fraud in their organisations. The examination was conducted in the year 2010 when 13¹⁰ of German-speaking Switzerland (nine) and Western Austria’s (four) convicted offenders were interviewed face-to-face (twelve) or by telephone (one) in German with a total time duration of 1060 minutes.¹¹ The investigation and conviction covers the period from 1990 to 2010; most of the convictions took place in the new millennium.

Sutherland (1940) wrote that crime can take place in elite groups, and introduces fraud by these “upper socio-economic classes” into criminological theory. For us, social status is not the key point. Our theoretical position is similar to that of Edelhertz (1970) or Shapiro (1990, p. 363): “looking beyond the perpetrators” wardrobe and social characteristics and exploring the *modus operandi*: in other words, as with crime scripts, we are addressing „how” rather than primarily „why” questions. Status can be an enabler of crime, inasmuch as it gives people the authority and indeed power to give instructions that normally will be obeyed, and creates status barriers to intervention even by auditors, regulators and police. With high professional standing and respectability – former and still active managing directors, partners, owners or CEOs of large firms as well as other senior executives or accountants at highest management levels, politicians, and supervisory board members –, our respondents correspond to the traditional white-collar criminal stereotype¹²: middle-aged white male, wealthy, well educated, no previous criminal record, and a stable employment in a white-collar position (ACFE, 2009; Croall, 2001; Weisburd et al., 1991). This is why we call our fraudsters “high profile”¹³ or “elite” (Stephens, 2007); and their victims also were usually large and famous organisations for which they have worked. (Indeed a few fraudsters are still working for their organisation, which had previously been their

¹⁰ Some data were repeated during the last couple of interviews without additional information. Due to this circumstance, in our view, 13 interviews are enough to make some conceptual points. One interview was not analysed because of the low information content compared to other tape recordings.

¹¹ The applied interviews are semi-structured, problem-centred and open-ended (Witzel, 2000).

¹² A stringent obligation to observe confidentiality, as well as the empirical problem of drawing conclusions make us careful to avoid more background information about the interviewees.

¹³ In our article, the high profile has no bearing on the offenders’ personality profile.

victim).¹⁴ Moreover, their combined crimes caused a direct loss of several hundred million Swiss Francs or Euros.¹⁵ These interviewed individuals are notably able to use their capabilities as well as their occupational positions and consequently opportunities to commit “upperworld” criminal offences (Croall, 2001).

This work used a semi-structured guideline questionnaire. The applied method provides a basis for gaining in-deep knowledge about the offenders’ perspectives. We claim no universal validity for our findings, rather a heuristic for further exploration and an ability to falsify theories that claim to be universalistic. In a wider context this more explorative procedure permits the development of relevant issues and structures given by the responding individuals. The empirical research area, examining high profile offenders, is very time-consuming and difficult to access, not only because of the seriousness of this topic and the confined respondent group, but also because of strict data protection regulations. In order to gather information regarding accessing target groups, the following were contacted: prosecution offices, commissions of enquiry, ministries of justice, solicitor’s offices, courts of law, consulting and auditing firms as well as the Association of Certified Fraud Examiners (ACFE). Some of these institutions contacted the convicted persons and shared the contact data for scientific purposes only on a proper legal basis. Others established contact by communicating the university address and telephone number to the fraudsters and asking them whether they were interested in participating in our study. In addition, a few respondents were traced through a court records analysis by the senior author of this article. Subsequently, an initial contact via telephone or email served as a basis to individually agree further actions in accordance with our fraudsters’ wishes, e.g. sending the interviewees additional information about the research or an assurance of anonymity before the meeting took place.

Whilst finding convicted individuals who voluntarily participated in the research, the interviewer (and first author) conducted some pre-tests to minimise the risk of mistakes as well as to avoid misunderstandings between the interviewees and the interviewer, e.g. regarding verbal formulations of the questions. For this self-training, non-criminal study volunteers put themselves in the role of white-collar offenders, who subsequently were interviewed by the senior author of this work in a simulated situation. This procedure helps to remove ambiguities regarding the formulation of questions, and also benefits the interviewer with his behaviour and appearance. Whereas Cressey and other researchers examined white-collar criminals in prison (e.g. Benson,

¹⁴ In the majority of our examined cases, an accurate separation of occupational from corporate crime is not possible. Generally, the majority of the interviewees offended simultaneously both for themselves and for the organisation. Those cases where our convicted persons are still (or again) holding their position in the victimised organisation may be explained by two facts: First, some frauds are not only committed „for themselves” but also „for the company”. Second, a senior position in a company is sometimes difficult to replace immediately and the person was considered to be still valuable overall.

¹⁵ Swiss and Austrian courts as well as law firms selected the offenders according to the kind of fraudulent behaviour and to the damage quantified in Swiss Francs or Euro as high as possible. A stringent obligation to observe confidentiality, as well as the empirical problem of drawing conclusions make us careful to avoid an average or median figure of the damage caused. Moreover, losses to victims may not correspond to profit to offenders, and may be difficult to calculate accurately (Levi & Burrows, 2008).

1984; Klenowski et al., 2010; Spencer, 1959; Willott et al., 2001; and others), all our interviews were carried out with 13 fraudsters who already had been released or who never did any jail time, though all eleven male and two female offenders were convicted by a Swiss or Austrian court. However, our results have to be handled with some caution. First, our empirical contribution is limited to detected high-profile offenders in Switzerland and Austria. Second, the explanations of offending are based on an analysis of ex-post verbalisation (possibly suitably modified for audiences even in private) and “may involve appeal to a vocabulary of motives” (Mills, 1940, p. 907), which could be pre-formed for a specific group. And finally, even though we do not intend to test the FT (except inasmuch as we are testing its universal applicability), our sample size is too small to formulate a defensible universally applicable hypothesis. External white-collar (or “organised”) criminals operating non-collusively outside an organisation (e.g. tax or credit card fraudsters, clandestine workers etc.) or undiscovered perpetrators are not considered at all. Given the role that Austrian and Swiss banks and other professionals have played as facilitators of money laundering and tax evasion, this is a limitation.

We were aware of the risk that interviewees could enact a kind of performance for us rather than revealing their thoughts to strangers. Though this risk cannot be entirely excluded, measures were taken to keep this to a minimum, via a private and tension-free interview environment. No model can eliminate respondent bias from retrospection and concern about how direct observers will view the morality of their conduct (Levi, 2008). All fraudsters volunteered to participate in one to one conversations at a time and place of their choice, usually in the afternoon at a café. There was no surveillance from prison officers behind closed doors, which may distort the collected data material. The respondents were informed comprehensively in advance about the purpose, scope and aims of the inquiry as well as anything else requested. Before the interview, the perpetrators received a signed university letter, which have assurances of anonymity. Furthermore, some small talk increased rapport and made the atmosphere comfortable for this sensitive issue. The interviewee was told that s/he could feel free to skip particularly distressing questions but none did so; everyone voluntarily answered all questions. The questionnaire includes recurring but reformulated questions to support the verification of whether an answer was evasive or deceitful. In total, systematic errors or inconsistencies in the transcribed interviews are very rare. Considering the careful planning and preparation as well as the serious attitude of our respondents, we assume a negligible effect on the answers.

All interviews were recorded on tape followed by transcriptions, which were compiled verbatim after having obtained an agreement of the respondents. The fundamental objective was to make sense of unordered data collected by examining it from various angles. Strictly guided by rules, the data obtained were systematically analysed via several codification processes compliant with all requirements of the computer-aided content analysis named GABEK®/WinRelan® (Zelger &

Oberprantacher, 2002).¹⁶ Although our dataset is small, we consider it appropriate to use an elaborate computer-based analysis to accommodate the complexity of the collected manifest content (what definitely has been said) and, hence, to allow detailed inferences to be drawn about offenders' perspectives on the elements of the FT. The codification is built up from four sequential working steps recommended by Zelger and Oberprantacher (2002). The analysing procedure occurs without any coder's influence on the findings and without any room for assumptions. Even if it is impossible to deny the crucial role played by our own subjectivity and intuition in the final process of data interpretation, all previous content analysis results are solely based on a respondent's perspective. The codification process in a first phase of analysis consists of an identification of content-relevant lexical terms (nouns, adjectives, verbs and compound terms). Apart from this basic analysis, a second working step occurred in which explicitly mentioned positive and negative evaluations of terms were identified. This is based on how respondents evaluate terms, e.g. negative evaluation of pressure: "[...] the terrible pressure [...]" (WCC 10, 2010); positive evaluation of internal control system: "[...] a perfect internal control system [...]" (WCC 5, 2010). An evaluation always has to be "obvious", or coding is forbidden. Then, they were separated into an actual (expressed real phenomena and its evaluation), e.g. "[...] the internal control system is poor [...]" (WCC 3, 2010); and a desired (expressed hypothetical phenomena and its evaluation) condition, e.g. "[...] an effective internal control system would solve many problems [...]" (WCC 8, 2010). In a third review of the transcripts, the causal connections expressed by the fraudsters are coded, e.g. "[...] the more greed the more incentive [...]" (WCC 4, 2010). Beyond that, fraud-favourable and fraud-unfavourable influences from an offender's view were identified and coded, e.g. "[...] the better the controls the less fraud [...]" (WCC 8, 2010). After the three steps, a fourth and last procedure according to several rules (syntactic, semantic and pragmatic) occurred and finally re-presents the data into a hierarchically ordered structure to get from pieces of text units through rule-based information compressing to an overall summarised view. If a coded term "variable A", e.g. "pressure", reaches a higher level in the hierarchical structure than "variable B", e.g. "incentive", if "variable A" is evaluated more often than "variable B" and if "variable A" is embedded in more causal relations than "variable B", then "variable A" is considered as more relevant than "variable B." In general, different individuals are able to code the same text in the same manner to assure validity, reliability and consistency. All stringent coding and analysing processes are systematic and create a precondition for transparency, reconstruction and intersubjective comprehensibility

¹⁶ The applied method, devised by Professor Zelger, was developed for scientific purposes. GABEK®/WinRelan® was selected as one of the finalists of the European Academic Software Awards (EASA) and still is used at several major universities, e.g. Stanford University. Albeit other programs may be used more widely, the software choice depended on our purpose and target of the content analysis: achieving a better understanding in terms of cause-effect relationship of the transcribed interviews. In total, 425 content-relevant terms and 10.505 connections between them were identified and coded.

(Zelger & Oberprantacher, 2002). Ultimately, the content analysis systematises the distributed knowledge and, thus, promotes a holistic view of the records.

4. Results

Some conclusions deviate from the general analysis in recent scientific papers. Overall, it is astonishing that the constellation of the FT elements is found in the same manner from the perspective of our interviewed white-collar offenders. According to them, pressure, opportunity and incentive are relevant “triggers”. A substantial difference between the literature findings and this empirical study is that some of our high profile fraud perpetrators consider that not all elements of the triangle are mandatory for committing “upperworld” white-collar crime. When fraudsters never intended to commit fraud at any stage and honestly believe that their behaviour is not criminal (Cressey, 1953),¹⁷ opportunity alone is obligatory for fraudulent behaviour. According to these respondents, there is no pressure, no incentive and no rationalisation at all. Several interviewed convicts from different employment settings never intend to commit fraud at any stage, having realised too late that they were breaking the law or still maintaining that their activities were not wrong at all: “We did not have unlawfulness in our mind. [...] What we did caused none of us to have a bad conscience” (WCC 3, 2010). “There was no inducement at all. We never decided to deceive the people. The intention never existed. [...] The incentive to defraud was not given, there was none [...] No, the inner voice may be the case for others” (WCC 10, 2010). “No, there was no pressure and, no inner voice because I was not aware of my wrongdoing at this time” (WCC 4, 2010). A multiplication of one of the FT elements by zero remains zero fraud. In the light of our findings, we have to reject the abovementioned multiplicative combination of the FT elements. In essence, they pretend neither to face any motivation nor rationalisation. This type of offender who sees nothing wrong in their behaviour patterns can be allocated to the category type (1) “slippery-slope fraudsters” (Levi, 2008, pp. 252–254).¹⁸ Levi describes this type of slippery-sloper as individuals who “do not see what they are doing as rule-breaking in any sense at all, and consequently do not need to „normalize“ it by reference to some technique of neutralization or special motivational account” with regard to their “unconscious repression mechanism” to solve the problem “by blotting out their awareness” (2008, p. 89 and p. 254). Hence, the absence of “specific” motivation and rationalisation is not completely surprising. Beyond that, some of our high profile perpetrators might be akin to the so-

¹⁷ Cressey describes this innocent kind of fraudster as „independent businessmen“ (Cressey, 1953, p. 102).

¹⁸ Levi categorises long-firm (bankruptcy) fraud thus: “running one or more businesses with the initial or subsequent aim of defrauding creditors” (2008, p. xvii), and other fraud into a threefold typology: “(1) pre-planned frauds, in which the business scheme is set up from the start as a way of defrauding victims [...] (2) intermediate frauds, in which people started out obeying the law but consciously turned to fraud later and (3) slippery-slope frauds, often in the context of trying [...] to rescue an essentially insolvent business or set of businesses” (2008, p. xix).

called “predators”¹⁹ because motivation as well as rationalisation have no or little relevance for them.

From the offenders’ perspective, “opportunity can make the thief” and leaks in organisations, e.g. absence of transparency as well as lack of control through weak compliance, auditing or management accounting, are seldom entirely closed down in their former organisations; this circumstance offers an attractive feasibility for fraud. “The weaknesses still exist. There is no real control mechanism. There is just too little control [...] if that can even be called a control.” (WCC 8, 2010). An interviewed fraudster states that “the controls do not work. You can report a faked up story [...] the opportunity was given, I did not want to do it but I had to do it [...] the organisation is a nice one but there are leaks everywhere” (WCC 2, 2010). At this point the interviewee support the often referred findings from Gobert and Punch (2007), who argue that an organisation can serve as an instrument to achieve goals, perform power and provide the motivation as well as the opportunity to a certain extent. The trust violators interviewed take advantage of organisational deficiencies, and, according to them, are easily able to commit fraud by their expert knowledge or special capability and by the incompetence of persons in their professional environment. Some offenders talked about the detailed knowledge to commit an upperworld offence as well as the importance of the hierarchical position of one’s occupation: “[My key position in the organisation] stimulated and cleared the way for the fraud. I built up the internal controls with some colleagues and I was the only person in the whole organisation, who understood exactly how it works” (WCC 11, 2010). Generally, individuals who develop or work with internal control systems know best how to manipulate them; but that does not mean that they have any intention at all to do so, or presumably the fraud rate would be a great deal higher than it plausibly is, even taking into account the dark figure of undetected frauds. The abuse of power and trust given to managers, and the fact that these persons are able to de-activate security measures, is often described as “management override”. Organisational weak points will be exploited mercilessly. Subsequently, in case of a deliberate act, most of them have “heartbeats, strong, if the external audit firm is checking in the organisation and then it continues in the same fashion as before [if not get caught], that is a fact [...] sometimes the auditors have too much trust in the wrong place” (WCC 11, 2010). Further, several respondents stress that decisions in key positions (key means access to cash flows) with full authority of one person or staff shortage – especially in cases with a lack of time – may constitute an alluring occasion. Even though the respondents do not describe opportunity as a classical motivational trigger, this element has to exist for them, as previously mentioned. It is regarded as the only necessary condition of all elements. Hence, we reject the previously cited unconstrained additive combination.

¹⁹ The literature distinguishes between two forms of trust violators: “accidental fraudster” and “predator”. The former, a law-abiding person, is often characterised as the typical white-collar criminal. The latter, an individual who might have begun as an “accidental fraudster” turn into a “predator” and, hence, is better organised, has more complex concealment schemes, and is better prepared to handle monitoring, control systems and auditors than the typical fraudster. A “predator” only needs opportunity to commit a financial crime (Dorminey et al., 2012; Rezaee & Riley, 2010).

However, the results also conclude that the perceived pressure is salient to most white-collar criminal offences. As documented through the content analysis, this element is the most commonly correlated with committing fraud and is identified as the most often directly linked element to triggering fraud, though not a necessary condition for fraud. Moreover, this most responsibly made trigger for fraud is also the most often negatively evaluated element by the respondents found in all our empirical data by far. “[In the organisation] a lot of pressure was applied and I have been rudely insulted. That was the beginning of my problem” (WCC 2, 2010). “The most likely important trigger was the pressure” (WCC 1, 2010). “Maybe it would have been possible to handle the pressure in another way and try to find other solutions” (WCC 6, 2010). This statement shows that from an offender’s perspective, a fraudulent act seems to be a plausible possibility to escape the before mentioned non-shareable problem. Generally, our pressure-findings can be divided into the two following subgroups:

Pressure caused by external influences. “My behaviour was only caused by the pressure situation because the unpleasant working atmosphere was very vicious and this was the trigger, which finally results in fraud” (WCC 1, 2010). Next to an inadequate and atrocious organisational culture, financial aspects also can put this kind of exertion on managers. An interviewed person explicitly mentioned that pre-set goals are mainly responsible: “I never put myself under pressure. To fulfil external requirements, not private [...] but financial, caused pressure” (WCC 12, 2010). In addition, we found that different profiteers (e.g. a person suffering from illness or a briber in a network of intrigues) may have decisive influences, too. Pressure is perceived as similar to the impact of external influences but exists predominantly in an offender’s mind. In this case the fraudster may be afraid of appearing as an underdog. “You are thinking that people are saying bad things about you [...] in retrospect I really do not know if this was indeed the case or just my own imagination” (WCC 6, 2010). The pressure to fulfil self-generated „requirements“, which are as high as possible by the effort to escape through creating a “homemade mission impossible.” Afterwards it has become apparent that this is a dead-end street: “The pressure was psychological [...] so I had no more power left to withstand [the situation]. I thought I could fix everything with the figures. I set myself very high goals. My employees told me that it would be impossible to achieve this goal. I tried to achieve this anyhow” (WCC 2, 2010).

Yet, fraudulent behaviour caused by pressure can create additional pressure. Several offenders try to correct their criminal act after the fraud has been carried out. In their perception, “there is hope to straighten the old or previous offence out through another additional offence. Worrying about being discovered” (WCC 6, 2010). “I wanted to redress this whole situation again. That has been an enormous pressure” (WCC 2, 2010). Some of the interviewed perpetrators describe it as like some kind of a “pressure pull”²⁰, which makes an individual liberation seldom

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Nieuwenboer and Kaptein (2008) focus on the spiralling nature of white-collar crime. From a theoretical perspective but without any empirical studies they address the spread and growth of corruption in companies and, drawing on social identity theory, identify three organisational spirals: The spiral of divergent norms, of

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pressure, and of opportunity.

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possible. Nevertheless, our respondents would not accept any help from an anonymous, trustful and neutral institution at the time of their offences because of suspiciousness, self-aggrandisement and overestimation of their own capabilities, as they admit. Therefore, an ombudsman's office, an internal corporate helpline or an external point of contact are considered as not professionally competent enough. The fraudsters seriously believe that their matters would not be legally enforceable by such an internal or external contact institution. For them, the non-shareable problem causes pressure and remains non-shareable.

Overall, cyclical interrelations can be seen in our empirical data, showing pressure in a repetitive and self-reinforcing process. This finding again highlights the importance of this motivational element. From the interruption or modification of the pressure element, within the cyclical interrelations primarily caused by bullying at work, strained relationships or overly high achievement goals, conflicts and negative organisational culture, the adversely amplifying effect could be abrogated or even discontinued. This has implications for our understanding of the triggers of fraudulent behaviour and their prevention. Instead of pressure reduction, our convicted individuals perceive that there are unchanged weaknesses in their actual organisations, whether their former victims or other companies. According to the respondents, a reduction of pressure would have a highly positive effect, which would create a culture of trust and ultimately reduce such crimes. The question arises of whether a reduction or even elimination of this FT element may create a complacent work environment where goals are achieved less frequently and generate net losses in organisational profitability. Apart from the fact that this would exceed the scope of our article, we assume that there is no universal answer, rather an individual one to find an adequate balance tailored to an organisation, a position and even to a person.

A few fraudsters regard their fraudulent behaviour as an incitement to repay private debts or liabilities. In particularly important to white-collar criminals with high social and professional standing, status can create pressure, too. "My incentive was not to appear as a loser" (WCC 6, 2010). With this argument, the boundaries between the elements of incentive and pressure melt into their common root: "motivation" because the respondent is afraid of appearing as a loser and this fact could cause pressure, too. The empirical study makes plain that incentives can be perceived in many different ways. Some offenders compare it with sailing in choppy waters, which makes an individual exemption, similar and as problematic as pressure, hardly possible. According to them, incentives are not mainly responsible for fraudulent behaviour but relevant. Most of our respondents enriched themselves personally and tried to harm the organisation with or without intention to offend. Our participants explicitly mention their motivation, which can be partly driven by selfish greed: "It is driven by greed. The incentive was tangible in my case, so materialistic. I lost ground; many of us feel the same. Then you will overcome your own limitations. You want a higher and higher wage" (WCC 4, 2010). "My incentive was early retirement" (WCC 7, 2010). "The opportunity was an incentive. [...] Incentive [...] to live over the usually possible standard of living in my situation. [...] Then it became a sporting event. [...] It was a challenge in this sense. [...] Breaking out of this situation is difficult" (WCC 11, 2010).

Nevertheless, some of the upperworld crimes committed in the course of our respondents' occupation are a mixture between occupational (managerial or individual) and corporate (organisational) crimes. For some fraudsters the criminal incident leads to a higher added value for the organisation as well as for themselves: "You have to exhaust the legal boundaries up to a maximum and think about new possibilities to do something for the organisation. This incentive is worth more [...] to realise your project" (WCC 9, 2010). The triangle element incentive seems to serve as a desirable force to act as economically as possible or as an instrument to get the desired doses of adrenalin through risk taking activities. Such a type of propulsion can derail if it is exploited too much. In this context, the fraudsters explain that occasionally there is a thin line between legal and illegal.

Cressey took the view that rationalisations "were always present before the criminal act took place" (1953, p. 94). Data acquisition in this area of research commonly takes place after the perpetrator has committed a crime, so one might regard retrospective reflections – even if believed by offenders themselves – as being contaminated by post-event processes, rather than as a "black box" flight recorder. The analysis of our interviews suggests that some fraudsters attempt to shirk responsibility, e.g. by arguing that controls were weak, pressure was tremendous etc., and may regard themselves as a victim of a perfect storm due to misfortune and setbacks (Sykes & Matza, 1957) with an opportunity to relieve themselves and solve the non-shareable problem. One might overstate and add that some individuals simply drifted into this situation without conscious decisions to break the law. Conversely, the argument of "weak controls" or "high pressure" can be construed as part of a rationalisation. Thus, in our empirical data analysis this FT element can solely be detected by means of our own subjective interpretation because the respondents do not excuse their offences or make them smaller than they actually are. If we take our interviewees seriously and exactly at their word without "over-analysing" the statements, none of our fraudsters explicitly rationalise their fraudulent behaviour. Compared to other studies with white-collar criminals the non-existence of rationalisation could relate to the fact that our respondents were not interviewed in prison and hence may feel less as a convict and more on a par with the interviewer, not in an unequal footing, which could initiate or contribute to rationalisation. However, we assume that the process of rationalisation is Cressey's subjective point of view, his personal interpretation; and as in our case, this may be mistaken. Instead of rationalisation, a fraud-inhibiting inner voice and a guilty conscience are identified, which is not necessarily inconsistent with the FT but is a new twist on the "habitus" of how some fraudsters come to do their work. According to the respondents, "the inner voice said: Do not do that, drop it, do not make that" (WCC 6, 2010). "The appeal was greater than the inner voice" (WCC 11, 2010). "I have repressed the inner voice" (WCC 9, 2010). "The inner voice persisted the first time. After all my undetected transactions over a period of several years, I was able to sit back and relax. It is brutal. Put that in your pipe and smoke it" (WCC 12, 2010). Sutherland (1939) or Gobert and Punch (2007) – neither of which studies interviewed fraudsters – impute no experience of any guilt and no remorse to the offenders, whereby they relativise their argument

with the addition that it is difficult to comprehend what is exactly happening in a fraudster's mind while committing fraud. By contrast, we note that they still have a bad conscience; even years after their frauds. The interviewees do not find themselves to be above the law. According to them, the fraud-inhibiting inner voice before they commit a delinquent act becomes quieter over time. We document that in our cases, the inner voice, which deters an individual from fraud, is mainly affected by the organisational culture. "This inner voice was governed by hassle and trench warfare from all directions within the organisation" (WCC 1, 2010). In addition, the longer the acts of the delinquents remain unnoticed, the less they have a guilty conscience. "After a while the inner voice disappeared [...] then it [the fraud] became a day-to-day routine" (WCC 12, 2010).

5. Discussion

Contrary to findings in the literature and the previously mentioned international fraud standards, we found that only opportunity is (perhaps tautologically) mandatory for committing a white-collar crime, according to our interviewed offenders. This relevant theoretical contribution has to be considered wherever the FT is used. Our respondents perceive the existence of the necessary condition opportunity and the triggering element "high pressure" in an organisation as a breeding ground for fraudulent behaviour. The clear majority of our detected offenders nominate pressure as the most relevant FT element mainly responsible for their crimes. Beyond that, the importance of pressure is affirmed by several findings from the literature. Thus, authors from different backgrounds all stress that high-pressure environments in organisations are a particularly relevant fraud risk factor. Such an environment is not necessarily an indication of the presence of white-collar crime, but it serves as a "red flag" and special attention has to be paid in these circumstances. It would not be surprising if delinquents in top-management positions put a high value on neutralisation of their acts because they are part of respected occupational classes, wherein the perception that they are dishonest can quickly destroy their private and professional reputation, at least if it is marked by formal sanctions. Hence, it is intriguing that we identify a fraud-inhibiting inner voice before and a guilty conscience after the crime, instead of merely rationalisation. This voice becomes quieter over time before the fraud occurs. Moreover, the longer the frauds remain hidden, the less the offenders have a guilty conscience after the crime. The implication of these continuously temporal changing components is a new finding. In general, rationalisation has to be complemented by the inner voice (inhibiting or triggering) and the conscience (clear or guilty). It must be recognized that the elements accompanying and influencing fraud modify over time – before and after the fraud – mainly affected by environmental conditions, e.g. the corporate culture.²¹

²¹ Banking scandals since the financial crisis of 2007-present have illustrated the importance of individual as well as general corporate culture as enablers of white-collar crimes, though it remains to be seen whether those

Overall, serious studies that systematically examine the causes of fraudulent behaviour and use interviews with high profile white-collar criminals are rare. Thus, journal papers in this field are limited. To enhance clarity regarding the causes of white-collar crime, in particular in the corporate context, is a problem for researchers, as noted by scientists from various fields (Gobert & Punch, 2007; and others). Cressey's nearly 60 year old vehicle, the FT, based on a sample of embezzlers persists as a sacrosanct benchmark and from an accounting perspective, appears as a general theory of financial crime due to its dominant position in fraud standards. Granted, as is usually the case with models, the FT does still offer an incomplete but useful abstraction of complex interactions, it nevertheless neglects the impact of social systems on individual decisions to commit fraud. Greater importance arguably should be attached to a discipline of the social sciences, where fraud has a long-established place in research: criminology. New approaches allow alternative insights to post-fraud interventions, e. g. effective sanctioning of perpetrators to avoid recidivism and increase general deterrence, and to fraud prevention, e. g. in terms of shaping internal and external corporate governance, and the legitimacy of controls. To enrich the fraud accounting research, education and practice, we suggest intensifying the dialogue with criminological research, including that which problematises the professional and social construction of fraud. Our study did not have the opportunity to examine how far the social context exactly affects fraudulent behaviour in organisations; but a focus on individual decision-making denuded of the context in which offenders see Machiavellianism and narcissism as positive traits of business heroes seems misplaced. Galbraith observes that "legal self-enrichment in the millions of dollars is a common feature of modern corporate government" (2004, p. 27). Numerous examples in his book "The Economics of Innocent Fraud", based on the assumption that there is a gap between the predominant opinion and the truth, illustrate the manner in which fraudulent practices become respectable, legitimate and even institutionalized.

Moreover, an inclusion of psychological aspects may expand our understanding of the motivations and rationalizations for fraud. Kohlberg's approach (1981) is based upon the assumption that moral development is essential for an individual's behaviour. Levels of moral reasoning are developed in the same sequence, depending on several criteria such as the ability to project one's self into the other's perspective, though not everyone reach the highest moral reasoning. More norm-infringing forms of egregious fraud are more difficult to justify morally to all but the most sociopathic, hence, independent of the risks of intervention by organisational controls, less likely to happen.

Benson (1984) explored the effects of conviction on the occupational status of white-collar offenders with data drawn from the case histories of 70 white-collar offenders. His results are difficult to compare with ours because he did not examine the same kind of offenders as we did; but important for this work is Benson's finding that the type of occupation is an important factor in

currently not identified as "cultural problems" will turn out to have behaved significantly differently. Accounting for inter-capitalist differences is inhibited by their lack of transparency.

white-collar criminals" loss of occupational status following conviction. Convicted fraudsters in this league seem to know they would destroy their reputation even more if they do not admit that their crimes were their own errors of judgment. These individuals may seek to depict themselves as human beings with strengths and weaknesses; instead of disavowing their delinquency, they try to make it acceptable or at least much less unacceptable through showing regret and remorse.

They are convicted and the process has already damaged their prestige independent of how they are sentenced; "the process is the punishment". As a next step, convicted white-collar offenders are reflective enough to recognise that they have to rebuild their damaged reputation through exhibiting moral fibre and some degree of contrition. The difficulty for their audiences is to decide when to take these claims about change as genuine and when to view them as just a further stage in their Machiavellian attempts to manipulate their environment. If we adopt the precautionary principle, we may never find out that they would not have reoffended; if we are trusting, we sometimes may find that we have been conned again.

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Reviewers' comments and response:

This paper seeks to explain motives for fraud from the perspective of the offenders. It tests the explanatory power of fraud triangle. Evidence is provided from 1060 minute interviews with 13 convicted offenders from Switzerland and Austria. I have a number of observations.

1. It would be helpful to explain how the concept of "fraud" is deployed in the paper. Currently, it makes numerous mention of the word and does not explain the meaning(s) that the authors attach to the term. Without some conceptual clarity, it is difficult to take the reader with you.

"Response to Reviewer comment No. 1 (particularly relevant: Introduction): The content of rules, auditing standards and criminal laws is constantly changing over time and jurisdiction: thus, the framework within which the label of 'fraud' is attached is relative from a legal as well as from a social point of view (Sutherland, 1939). Attempts to generate – explicitly or implicitly – a universal definition and demarcation of "fraud" invariably generate boundary disputes. Under the interdisciplinary and multifaceted concept of fraud, we generally mean a criminal violation of financial trust (Cressey, 1950; Sutherland, 1941). White-collar criminals, sometimes called "trust violators", commit fraud in a business environment, usually without any physical force, and confer an illegal economic advantage for themselves and/or for their organisation. According to our paper, the illicit behaviour of our convicted Swiss and Austrian fraudsters in the course of their occupational activities (or by abuse of their authority to dispose of corporate assets) causes serious tangible and intangible damage. Explanations for why some individuals do not follow certain rules under adverse conditions and others do still provoke debate in accounting, criminology and in other fields of research."

2. The paper's theory of fraud is primarily an articulation of the fraud triangle and the fraud diamond rather than any general theory of fraud. It would be helpful to rationalize the approach of the paper and provide better connections with the empirical evidence.

"Response to Reviewer comment No. 2 (particularly relevant: Introduction): Several risk factors of different fraud standards are predicated on the FT. The fraud risk factors' relevance is acknowledged by American standards, [see Auditing Standard (AS) No. 5 (PCAOB, 2007) or Statement on Auditing Standards (SAS) 82 (AICPA, 1997)] as well as by other international auditing standards [Pruefungsstandard (PS) 210 (IDW, 2006), International Standard on Auditing (ISA) 240 or ISA 250 (IFAC, 2013)]. The Statement on Auditing Standards, SAS 99 (AICPA, 2002), "categorizes these factors according to the fraud triangle" (Wilks & Zimbelman, 2004, p. 723; Donegan & Ganon, 2008; Norman, 2010).

The FT is a sub-set of the more generic Crime Triangle, and though it focuses us away from broader issues of the non-incrimination of privileged business elites (Barak, 2012; Friedrichs, 2009), it is commonly used in academic and professional circles as a heuristic framework for explaining fraud."

3. The theory section of the paper individualizes the motivations for fraud though "social construction" is thrown in on page 15, but is not really used in the theory section of the paper. Of course, deviant behavior is always possible and all individuals eventually die,

but social problems persist. This would suggest that fraud is embedded in social systems. We cannot understand what individuals do without the social context. Emile Durkheim's famous work on suicide makes the point that suicide is the most individual of human acts, but it is not the act of an isolated individual. Rather social values relating to notions of success, failure, happiness, fulfilment, etc. the context of the act. I would argue that the social context is equally relevant in explaining the persistence of fraud.

For example, capital markets constantly expect companies to report higher profits. In western culture, an individual's worth is often assessed by accumulation of material wealth. Those accumulating vast amounts are lauded as stars, leaders and role models living glamorous lives, which others ought to emulate. Such cultural values incubate fraud and seem to be beyond the control of any single individual. This should encourage some reflections on the claim that "... Firefighters know that a fire can be extinguished by eliminating any one of the three elements" (pp. 20-21)." I can understand the analogy but the difficulty is that the origins of fire are not necessarily in the organization or the individual, but in society at large which is reproduced with the conscious thoughts of individuals (as critical realism suggests). May be an elaboration of "social construction" would be helpful.

A related difficulty is that over a period, some practices become normalized but seen through the lens of history may appear to be illicit or predatory. Thus Galbraith raises the spectre of what he calls "innocent fraud", which draws attention to how some negative practices become respectable and even institutionalized (Galbraith, 2004). Thus notions of responsible governance, etc. may actually nurture fraudulent practices as evident from practices at Enron, WorldCom and more recently at many financial institutions.

"Response to Reviewer comment No. 3 (particularly relevant: Discussion): Our study did not have the opportunity to examine how far the social context exactly affects fraudulent behaviour in organisations; but a focus on individual decision-making denuded of the context in which offenders see Machiavellianism and narcissism as positive traits of business heroes seems misplaced. Galbraith observes that "legal self-enrichment in the millions of dollars is a common feature of modern corporate government" (2004, p. 27). Numerous examples in his book "The Economics of Innocent Fraud", based on the assumption that there is a gap between the predominant opinion and the truth, illustrate the manner in which fraudulent practices become respectable, legitimate and even institutionalized."

4. The paper notes that despite various pressures and opportunities, some individuals do not succumb to fraudulent practices whilst others do. Why might that be the case? Is it anything to do with the moral development of the individual (see Kohlberg, 1981)? A consideration of this would enable the paper to expand understanding of the motivations and rationalizations for fraud.

"Response to Reviewer comment No. 4 (particularly relevant: Discussion): Moreover, an inclusion of psychological aspects may expand our understanding of the motivations and rationalizations for fraud. Kohlberg's approach (1981) is based upon the assumption that moral development is essential for an individual's behaviour. Levels of moral reasoning are developed in the same sequence, depending on several criteria such as the ability to project one's self into the other's perspective, though not everyone reach the highest moral reasoning. More norm-infringing forms of egregious fraud are more

difficult to justify morally to all but the most sociopathic, hence, independent of the risks of intervention by organisational controls, less likely to happen."

5. It would be helpful to have some background information about the interviewees (page 6), e.g. their gender, age, occupation, organizational positions, industry, etc. How do their reflections compare to what they said during their trials? It may be argued that the interviewees enacted a kind of performance for the authors rather than revealing their innermost thoughts to strangers. How did the authors deal with the performance part of the interviews? Why should we treat the interviews as knowledge?

"Response to Reviewer comment No. 5 (particularly relevant: Methods): Whereas Cressey and other researchers examined white-collar criminals in prison (e.g. Benson, 1984; Klenowski et al., 2010; Spencer, 1959; Willott et al., 2001; and others), all our interviews were carried out with 13 fraudsters who already had been released or who never did any jail time, though all eleven male and two female offenders were convicted by a Swiss or Austrian court.

With high professional standing and respectability – former and still active managing directors, partners, owners or CEOs of large firms as well as other senior executives or accountants at highest management levels, politicians, and supervisory board members –, our respondents correspond to the traditional white-collar criminal stereotype: middle-aged white male, wealthy, well educated, no previous criminal record, and a stable employment in a white-collar position (ACFE, 2009; Croall, 2001; Weisburd et al., 1991). This is why we call our fraudsters "high profile" or "elite" (Stephens, 2007); and their victims also were usually large and famous organisations for which they have worked. (Indeed a few fraudsters are still working for their organisation, which had previously been their victim). Moreover, their combined crimes caused a direct loss of several hundred million Swiss Francs or Euros. A stringent obligation to observe confidentiality, as well as the empirical problem of drawing conclusions make us careful to avoid more background information about the interviewees.

We were aware of the risk that interviewees could enact a kind of performance for us rather than revealing their thoughts to strangers. Though this risk cannot be entirely excluded, measures were taken to keep this to a minimum, via a private and tension-free interview environment. No model can eliminate respondent bias from retrospection and concern about how direct observers will view the morality of their conduct (Levi, 2008). All fraudsters volunteered to participate in one to one conversations at a time and place of their choice, usually in the afternoon at a café. There was no surveillance from prison officers behind closed doors, which may distort the collected data material. The respondents were informed comprehensively in advance about the purpose, scope and aims of the inquiry as well as anything else requested. Before the interview, the perpetrators received a signed university letter, which have assurances of anonymity. Furthermore, some small talk increased rapport and made the atmosphere comfortable for this sensitive issue. The interviewee was told that s/he could feel free to skip particularly distressing questions but none did so; everyone voluntarily answered all questions. The questionnaire includes recurring but reformulated questions to support the verification of whether an answer was evasive or deceitful. In total, systematic errors or inconsistencies in the transcribed interviews are very rare. Considering the careful planning and preparation as well as the serious attitude of our respondents, we assume a negligible effect on the answers."

6. The Fraud Diamond makes a somewhat abrupt appearance on page 15. If its elements are relevant to the study then they should be woven into the theory section. The brief discussion is too cryptic. My recollection is that Wolfe and Hermanson's notion of capability covers position/function, brains, confidence/ego, coercion skills, effective lying and immunity to stress. I could not see all these elements either in the interview data or the discussion. It would be helpful to have some clarity.

It might be useful to consider diagrams to explain the difference between the fraud diamond and fraud triangle.

"Response to Reviewer comment No. 6 (particularly relevant: Introduction): Wolfe and Hermanson (2004) expand the FT to a quadrangle named Fraud Diamond by including an additional element: The capability to commit fraud. The Fraud Diamond or alternative models, e.g. the fraud scale, the triangle of fraud action, M.I.C.E. etc. (Albrecht et al., 1984; Dorminey et al., 2012; Kranacher et al., 2011) are not relevant to this work."

7. Whilst the research is interesting, but its usefulness may be limited. All work of the kind is ex-post and is always full of caveats too (e.g. not everyone succumbs to the pressures or opportunities for fraud). Therefore, its implications for auditors, the design of internal controls and law enforcement agencies are fuzzy.

"Response to Reviewer comment No. 7 (particularly relevant: Methods): Yes, our results have to be handled with some caution. First, our empirical contribution is limited to detected high-profile offenders in Switzerland and Austria. Second, the explanations of offending are based on an analysis of ex-post verbalisation (possibly suitably modified for audiences even in private) and "may involve appeal to a vocabulary of motives" (Mills, 1940, p. 907), which could be pre-formed for a specific group. And finally, even though we do not intend to test the FT (except inasmuch as we are testing its universal applicability), our sample size is too small to formulate a defensible universally applicable hypothesis. External white-collar (or "organised") criminals operating non-collusively outside an organisation (e.g. tax or credit card fraudsters, clandestine workers etc.) or undiscovered perpetrators are not considered at all. Given the role that Austrian and Swiss banks and other professionals have played as facilitators of money laundering and tax evasion, this is a limitation."

8. As the paper calls for "intensifying the dialogue with criminological research" (p. 15) and claims that the study has "potentially important implications", it would be helpful to have some pointers. What would this dialogue and the study do for accounting research, education, public policies, corporate governance, investigation of frauds, sentencing fraudsters, etc.?

"Response to Reviewer comment No. 8 (particularly relevant: Discussion): To enhance clarity regarding the causes of white-collar crime, in particular in the corporate context, is a problem for researchers, as noted by scientists from various fields (Gobert & Punch, 2007; and others). Cressey's nearly 60 year old vehicle, the FT, based on a sample of embezzlers persists as a sacrosanct benchmark and from an accounting perspective, appears as a general theory of financial crime due to its dominant position in fraud standards. Granted, as is usually the case with models, the FT does still offer an incomplete but useful abstraction of complex interactions, it nevertheless neglects the

impact of social systems on individual decisions to commit fraud. Greater importance arguably should be attached to a discipline of the social sciences, where fraud has a long-established place in research: criminology. New approaches allow alternative insights to post-fraud interventions, e. g. effective sanctioning of perpetrators to avoid recidivism and increase general deterrence, and to fraud prevention, e. g. in terms of shaping internal and external corporate governance, and the legitimacy of controls. To enrich the fraud accounting research, education and practice, we suggest intensifying the dialogue with criminological research, including that which problematises the professional and social construction of fraud."

9. The purpose of footnote 1 is not clear. Is it at the right place?

"Response to Reviewer comment No. 9: Revised"

10. . Page 2 refers to "methodological background", but the section is primarily about methods rather than methodology which is a much bigger issue.

"Response to Reviewer comment No. 10: Revised"